

CLAIMS:

What is claimed is:

1. An inject-eject lever latch mountable to an outboard edge of a chassis mountable PC board for engaging a chassis keeper, comprising:
 - a lever shaped handle pivotally mountable to said PC board;
 - a pawl connected to said handle and movable therewith; and
 - means sensitive to said pawl position with respect to said chassis keeper for providing an interference catch state.
2. The lever latch of claim 1, wherein said chassis keeper comprises as pocket style keeper including top and bottom walls, and wherein said pawl is positioned to engage the inside of said keeper top wall when said latch is in the closed position.
3. The lever latch of claim 1, wherein said chassis keeper is a C-channel member having a top and bottom flanges, the top flange thereof terminating in a free end, and wherein said pawl is positioned to engage the inside of said C-channel top flange when said latch is in the closed position.
4. The lever latch of claim 3, wherein said position sensitive catch means includes a catch member pivotally mounted to said handle and having at least one protruding leg, said leg being positioned against said free end of said C-channel top flange when said catch means is in said interference state.
5. The lever latch of claim 4, wherein said lever shaped handle includes an elongate grasping portion and a pair of parallel extending, spaced apart journal plate members each extending outwardly from the end of said grasping portion and parallel to the longitudinal axis of said grasping portion, wherein each journal plate has a pivot hole in alignment with the other, wherein said pawl is a blade type member extending from and connected to both said journal plate members, and also including a spring positioned between said catch member and one of

said journal plate members to bias said catch member pivotally away from said journal plate member.

6. The lever latch of claim 5, wherein the top face of said elongate grasping portion extend in a plane, wherein said pawl extends upwardly to said plane of said grasping portion top face, and wherein said catch member and said protruding leg thereof are pivotable to extend into the plane of said grasping portion top face when said protruding leg is positioned against said free end of said C-channel top flange.

7. The lever latch of claim 3, wherein said position sensitive catch means includes a catch member slideably mounted to said handle and having at least one projecting foot, said foot being positioned against said C-channel bottom flange when said catch means is in said interference state.

8. The lever latch of claim 7, wherein said handle includes an elongate grasping portion, and a pair of juxtaposed flanges projecting from one end thereof, said flanges each having a pivot hole in alignment with the other, wherein said pawl extends from said same end of said handle grasping portion as said flanges, and is positioned transversely thereto, wherein said catch member is shaped to straddle said handle grasping portion with a top wall thereof and to straddle the outside of each of said flanges with a sidewall thereof, wherein at least one of said catch member sidewalls has said projecting foot extending therefrom.

9. The lever latch of claim 8, also including a pin end extending outwardly from each of said handle flanges, an elongate slot in each of said catch member sidewalls adjacent to said extending pin end, said pin end extending into a respective slot to guide said slidable movement of said catch to said handle, said catch member also including a first groove in one of said sidewalls thereof, and a second groove in one of said handle flanges, said first and second grooves facing one another to form an elongate encasement, and a spring positioned in said encasement to bias said catch member position with respect to said handle.

10. The lever latch of claim 3, wherein said pawl connection to said handle includes a common pivot pin on which both said handle and said pawl rotate, wherein said position sensitive catch means includes a cantilevered tab projecting from said pawl towards said handle, wherein said handle includes an interference shoulder, and wherein said cantilevered tab is positioned against said handle interference shoulder when said catch means is in said interference state.

11. The lever latch of claim 10, wherein said handle includes a grasping portion with a top face extending in a plane, and a pair of parallel extending journal plates, each having a pivot hole therein for said common pivot pin to extend there through, said journal plates extending transversely to said plane of said grasping portion top face, and wherein said interference shoulder is at the end of said grasping portion adjacent said journal plates and facing away from the plane of said grasping portion top face.

12. The lever latch of claim 11, wherein said pawl also includes a pair of sidewalls extending below said cantilevered tab, each said sidewall having a pivot hole for said common pivot pin, said pawl further including a upstanding shoulder supporting said cantilevered tab and a foot portion extending from said upstanding shoulder and said sidewalls on the opposite side thereof from said cantilevered tab.

13. The lever latch of claim 12, wherein said foot portion has a top surface spaced from said upstanding shoulder, and a pair of parallel extending downwardly projecting plates, wherein said foot portion is sized to fit between said top and bottom flanges of said C-channel.

14. The lever latch of claim 13 also including a spring positioned between said pawl and at least one of said handle journal plates biasing said pawl to a rotated out of alignment position.

15. An inject-eject lever latch for a PC board, for engaging a chassis keeper, comprising:
a lever shaped handle pivotally mountable to said PC board, said handle carrying an abutment shoulder adjacent the keeper facing end of the handle; and

a pawl for engaging said keeper said pawl being pivotally movable with respect to said handle and having a tab for engaging said handle abutment shoulder, whereof a friction fit occurs therebetween to hold said pawl and said lever in a predetermined fixed positional relationship when said pawl is at a predetermined pivoted position with respect to said handle.

16. The lever latch of claim 15, wherein when said handle and pawl are in said friction fit they are longitudinally in alignment with one another.

17. The lever latch of claim 16, wherein said friction fit is released by pressing said tab towards said handle.

18. The lever latch of claim 17, wherein said handle and said pawl are mounted for rotation on a common axis.

19. The lever latch of claim 18, wherein said handle includes a flat grasping portion extending in a plane, and a pair of parallel extending journal plates extending therefrom, said journal plates each having a pivot holes for mounting onto a pivot pin, said journal plates extension being transverse to the plane of extension of said grasping portion.

20. The lever latch of claim 19, wherein said handle tab abutment shoulder is adjacent to said journal plates and facing thereto.

21. The lever latch of claim 20, wherein said handle journal plates each have an insertion edge facing upward to the plane of said grasping portion, and an extraction edge facing outwardly from said grasping portion and orthogonal to said insertion facing edges.

22. The lever latch of claim 21, wherein said handle also includes an upward abutment shoulder on one of said journal plates rising up from a said insertion edge thereof.

23. The lever latch of claim 22, wherein said pawl includes a foot for engaging said keeper, and a pair of transverse facing parallel pivot plates, extending backwardly therefrom toward said handle grasping portion, said pawl pivot plates each having a pivot hole for mounting onto a pivot pin.

24. The lever latch of claim 23, wherein said handle and said pawl pivot pin is a common pivot pin, and wherein said pawl pivot plates extend inside of said handle journal plates.

25. The lever latch of claim 24, wherein said pawl also includes an upward standing tapered shoulder, said handle shoulder engaging tab being cantilevered towards said handle grasping portion shoulder from said upward standing tapered shoulder.

26. The lever latch of claim 25, wherein said pawl pivot plate adjacent said handle journal plate carrying said upward standing abutment shoulder has a elongate cavity therein, said cavity extending towards said plane of said handle grasping portion.

27. The lever latch of claim 26, also including a compression spring operating in said pawl pivot plate cavity and held in place by said handle journal plate upstanding shoulder.

28. The lever latch of claim 27, wherein said pawl foot is spaced from said upward standing tapered shoulder.

29. The lever latch of claim 28, wherein said pawl foot includes a transversely extending plate and a pair of outwardly extending and spaced apart projecting plates.

30. The lever latch of claim 29, wherein said handle extraction edges engage the tapered face of said pawl tapered upstanding shoulder on an extraction motion of said lever latch, and said handle insertion edges engage the bottom of said pawl on an insertion motion of said lever latch.